



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/079,345	02/20/2002	Byung Sun Hwang	035759-000001	7945

28722 7590 08/13/2003

BRACEWELL & PATTERSON, L.L.P.  
P.O. BOX 969  
AUSTIN, TX 78767-0969

EXAMINER

FLANDRO, RYAN M

ART UNIT

PAPER NUMBER

3679

DATE MAILED: 08/13/2003

7

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/079,345

Applicant(s)

HWANG, BYUNG SUN

Examiner

Ryan M Flandro

Art Unit

3679

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 3,6,7,13,16 and 17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,5,8-12,14,15 and 18-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 September 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## **DETAILED ACTION**

### ***Election/Restrictions***

1. This application contains claims directed to the following patentably distinct species of the claimed invention:

Group I – Figures 1-5

Group II – Figures 6-10

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, at least claim 1 is generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the

Art Unit: 3679

examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

During a telephone conversation with Michael Noe, Jr. on 01 August 2003 a provisional election was made with traverse to prosecute the invention of group II, claims 1, 2, 4, 5, 8-12, 14, 15, and 18-20. Affirmation of this election must be made by applicant in replying to this Office action. Claims 3, 6, 7, 13, 16, and 17 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2, and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Daily (US 3,822,053).

a. Claim 1. Daily shows and discloses a combination of only three major components **31, 35, 37**, including end posts **31** having a plurality of rail openings **44** on facing surfaces **47** of the end posts **31**, rails **35** extending between and terminating in the rail openings **44** such that the rails **35** are fully supported by the end posts **31** within the rail openings **44**; and panels **37** mounted directly to and fully supported only by the rails **35** (see figures 2, 2A, and 3-9).

b. Claim 2. Daily further shows the end posts **31** and the panels **37** being generally vertically oriented, and the rails **35** being generally horizontally oriented (see figures 2, 2A, and 3-9).

c. Claim 5. Daily further shows the rail openings **49,51** in each end post **34** comprise a notch **51** located at one end of the post **34**, and a blind hole **49** located adjacent to an opposite end of the post **34** (see especially figure 9).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 2, 4, 5, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lyman et al (US 4,364,546) (Lyman) in view of Montgomery (US 4,289,302).

a. Claim 1. Lyman shows and discloses combination of only three major components **2,4,5,6**, including end posts **2** having a plurality of rail openings **10** on facing surfaces of the end posts **2**, rails **4,5** extending between the rail openings **10**; and panels **6** mounted directly to and fully supported only by the rails **4,5** (see Lyman figures 1-3; column 2 line 33 – column 4 line 49). Lyman fails to disclose or teach the rails terminating in the rail openings such that the rails are fully supported by the end posts within the rail openings. Montgomery, however, teaches a precast fence arrangement wherein rails **2** terminate in

rail openings **4,6** such that the rails **2** are fully supported by end posts **1** within the rail openings **4,6** (see Montgomery figures 1, 2, 2A; column 2 lines 31-64) in order to provide “an arrangement to permit formation of relatively small notches in a fence post in spaced relation along a selected face of the post to receive and support rail means in a spaced parallel, generally horizontal relation” (see Montgomery column 1 line 38-42).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made modify the rail connection of Lyman by providing rail openings within the end posts in order to provide a virtually maintenance free (Montgomery column 1 line 52) precast rail to post connection system as taught by Montgomery.

b. Claim 2. The combination of Lyman and Montgomery further includes the end posts **2** and the panels **6** being generally vertically oriented, and the rails **4** being generally horizontally oriented (see Lyman figures 1-3).

c. Claim 4. The combination of Lyman and Montgomery includes each of the end posts **2**, rails **4,5**, and panels **6** being formed from the same type of reinforced concrete (see Lyman column 3 lines 28-38; see Montgomery column 1 lines 53-68). In any event, the selection of a known material based upon its suitability for the intended use is a design consideration within the skill of the art. In re Leshin, 227 F.2d 197, 125 USPQ 416 (CCPA 1960).

d. Claim 5. The combination of Lyman and Montgomery includes the rail openings **4,6** in each end post **1** comprises a notch **4 or 6** (top opening in Montgomery figure 2) located at one end of the post **1**, and a blind hole **4 or 6** (bottom opening shown in Montgomery figure 2) located adjacent to an opposite end of the post **1**.

- e. Claim 8. The combination of Lyman and Montgomery further includes a bond located between the end posts, rails, and panels to form a more rigid structure, wherein the bond is an adhesive (see Montgomery figure 6b; column 3 line 44 – column 4 line 2).
6. Claims 11, 12, 14, 15, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Montgomery in view of Lyman.
- a. Claim 11. Montgomery shows and discloses a plurality of end posts 1, each having a pair of upper rail openings 4 located on one end of the end posts 1, and a pair of lower rail openings 6 located adjacent to an opposite end of the end posts 1, wherein the upper and lower rail openings 4,6 are located on facing surfaces of the end posts 1; an upper rail 2 extending between each adjacent pair of the end posts 1, wherein the upper rails 2 terminate in the upper rail openings 4 such that the rails 2 are fully supported by the end posts 1 within the upper rail openings 4; a lower rail 2 extending between each adjacent pair of the end posts 1, wherein the lower rails 2 terminate in the lower rail openings 6 such that the rails 2 are fully supported by the end posts 1 within the lower rail openings 6 (see Montgomery figures 1, 2, and 2a; columns 2-3). Montgomery does not disclose a plurality of panels mounted directly to and fully supported by only the rails. Lyman, however, teaches a plurality of panels 6 mounted directly to and fully supported by only rails 4 (see Lyman figures 1-3) in order to provide panels that are easily installed, repaired, or replaced (Lyman columns 1 and 2) in a secure, attractive fencing system. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made modify the fence system of Montgomery by providing panels

supported between and by the rails in order to provide a panel fence system that is attractive, secure, and easily maintained as taught by Lyman.

b. Claim 12. The combination of Montgomery and Lyman includes the end posts 1 and the panels 6 being generally vertically oriented and the rails 2 being generally horizontally oriented (see Montgomery figure 1; Lyman figures 1 and 3).

c. Claim 14. The combination of Montgomery and Lyman includes each of the end posts 2, rails 4,5, and panels 6 being formed from the same type of reinforced concrete (see Montgomery column 1 lines 53-68; see also Lyman column 3 lines 28-38). In any event, the selection of a known material based upon its suitability for the intended use is a design consideration within the skill of the art. In re Leshin, 227 F.2d 197, 125 USPQ 416 (CCPA 1960).

d. Claim 15. The combination of Montgomery and Lyman includes the rail openings 4,6 in each end post 1 comprises a notch 4 or 6 (top opening in Montgomery figure 2) located at one end of the post 1, and a blind hole 4 or 6 (bottom opening shown in Montgomery figure 2) located adjacent to an opposite end of the post 1.

e. Claim 18. The combination of Montgomery and Lyman further includes a bond located between the end posts, rails, and panels to form a more rigid structure, wherein the bond is an adhesive (see Montgomery figure 6b; column 3 line 44 – column 4 line 2).

7. Claims 9, 10, 19, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Lyman and Montgomery, as applied above, further in view of Ferris (US 1,441,724).



- a. Claim 9. The combination of Lyman and Montgomery, as applied to claim 1, does not include pucks for joining the rails and the panels. According to Applicant's disclosure, the amorphous term "puck" is used to denote a cylindrical fastener used to connect the rails and the panels. Correspondingly, Ferris, teaches pucks 16 for joining rails 10,11 and panels 14 (see figures 1-5) in order to secure the panels to the rails. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made modify the rail to panel connection of the combination of Lyman and Montgomery by providing pucks in order to provide a proper connection between the rails and the panels as taught by Ferris.
- b. Claim 10. The combination of Lyman, Montgomery, and Ferris, as applied to claim 9, includes inserts 16a,15a located in each of the rails 10,11 and the panels 14, respectively, for receiving the pucks 12 (see especially Ferris figure 4).
- c. Claim 19. Montgomery shows and discloses a plurality of end posts 1, each having a pair of upper rail openings 4 located on one end of the end posts 1, and a pair of lower rail openings 6 located adjacent to an opposite end of the end posts 1, wherein the upper and lower rail openings 4,6 are located on facing surfaces of the end posts 1; an upper rail 2 extending between each adjacent pair of the end posts 1, wherein the upper rails 2 terminate in the upper rail openings 4 such that the rails 2 are fully supported by the end posts 1 within the upper rail openings 4; a lower rail 2 extending between each adjacent pair of the end posts 1, wherein the lower rails 2 terminate in the lower rail openings 6 such that the rails 2 are fully supported by the end posts 1 within the lower rail openings 6 (see Montgomery figures 1, 2, and 2a; columns 2-3).

- i. Montgomery does not disclose a plurality of panels mounted directly to and fully supported by only the rails, nor does he disclose inserts located in each of the rails and in each of the panels and pucks for joining the rails and the panels via the inserts.
  - ii. Lyman, however, teaches a plurality of panels **6** mounted directly to and fully supported by only rails **4** (see Lyman figures 1-3) in order to provide panels that are easily installed, repaired, or replaced (Lyman columns 1 and 2) in a secure, attractive fencing system. It is well known in the art to provide paneling between rails connecting adjacent posts.
  - iii. Additionally, Ferris teaches inserts **16a,15a** located in each of the rails **10,11** and the panels **14**, respectively, for receiving the pucks **12** (see especially Ferris figure 4) and pucks **16** for joining rails **10,11** and panels **14** (see figures 1-5) in order to secure the panels to the rails.
  - iv. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made modify the fence system of Montgomery by providing panels supported between and by the rails in order to provide a panel fence system that is attractive, secure, and easily maintained as taught by Lyman. Further, it would have been obvious to provide inserts in each of the rails and the panels as well as pucks in order to provide a proper connection between the rails and the panels as taught by Ferris.
- d. Claim 20. The combination of Montgomery, Lyman, and Ferris further includes a bond located between the end posts, rails, and panels to form a more rigid structure,

wherein the bond is an adhesive (see Montgomery figure 6b; column 3 line 44 – column 4 line 2).

### *Conclusion*

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents are cited to further show the state of the art with respect to rail and panel fencing systems:

U.S. Patent 6,517,056 to Shepard (see figures 11-13 – shows panel to rail connection)

U.S. Patent 6,293,523 to Fendler (figure 1)

U.S. Patent 6,126,145 to Mojr (see figures 1, 2, and 8.)

U.S. Patent 5,702,307 to Edgman (figures 1-7)

U.S. Patent 5,492,37 to Begue, Jr. et al. (see figures 2-5).

U.S. Patent 5,445,362 to Reppert (see figure 1 – items 20, 30, and 40)

U.S. Patent 4,369,953 to Greiner et al.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan M Flandro whose telephone number is (703) 305-6952. The examiner can normally be reached on 8:30am - 5:30pm Mon-Fri.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne H Browne can be reached on (703) 308-1159. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9326 for regular communications and (703) 872-9327 for After Final communications.

Application/Control Number: 10/079,345  
Art Unit: 3679

Page 11

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

RMF  
August 4, 2003



**Lynne H. Browne**  
***Supervisory Patent Examiner***  
**Technology Center 3670**